

Harold R. Albrecht

System Communications Division, Kingston, New York.

Mathematics (B.S., Kansas State University, 1961). After joining IBM in 1962, he participated in the design of a 7010/7740-based airline reservations system. In 1965, he joined OS/360 programming and was a principal contributor to the design and development of OS/360 BTAM. From 1968 through 1970, he managed the design, development, and early maintenance of OS/360 Conversational Remote Job Entry. In 1971-1972, he participated in the initial design of VTAM. Since late 1972 he has participated in the definition of Systems Network Architecture and the related communications subsystem design. Currently he is working on overall transmission services design.

C. Richard Attanasio

Research Division, Yorktown Heights, New York.

Physics (Sc. M., Brown University, 1961). Joined IBM in 1965 as an applications programmer. He has been involved in several aspects of systems programming, analysis, and design, the most recent being a penetration study of VM/370, which followed a one-year sabbatical in the Data Processing Division, working with a group on the development of VM/370.

Phillip G. Cullum

System Communications Division, Kingston, New York.

Mathematics (M.S., Ohio State University, 1968). Joined IBM at Kingston in 1967. Until 1971, he was a programmer in the development of TSS/360. Since 1971, he has been a member of the Communications Systems Architecture department where he has participated in the development of Systems Network Architecture.

W. Sands Hobgood

System Communications Division, Research Triangle Park, North Carolina.

Computer and information science (M.S., University of North Carolina, 1969). Thesis research was in three-dimensional computer graphics. He joined the IBM Research Division at the Thomas J. Watson Research Center in 1969 and worked on several projects in interprocessor communications and nonhomogeneous computer networks. He has been in the System Communications Division for three years, working on the Network Control Program. He is currently in Communications Systems Architecture, charged with tracking the purity and integrity of Systems Network Architecture and absolving architectural deviates.

Gerd Hochweller

Deutsches Elektronen-Synchrotron, Hamburg, Germany.

Physics (Dipl. Phys., University of Marburg, Germany, 1965). Joined Deutsches Elektronen-Synchrotron (DESY) in Hamburg, Germany, in 1966, investigating data acquisition and manipulation in high-energy physics experiments. From 1971 to 1973 he was a Postdoctoral Fellow at the IBM Research Laboratory in San Jose. He returned to DESY in 1973 and is now involved in real-time systems for minicomputers, on-line connections of small computers to a large, central computing facility, and the computer control of electron accelerators.

Authors

Henry M. Gladney

Research Division, San Jose, California.

Chemistry (Ph.D., Princeton University, 1963). Joined the physics department of the IBM San Jose Research Laboratory in 1963 and worked in spectroscopy, crystal growth, and laboratory automation. From mid-1968 until early 1970 he was assigned to the technical staff of the IBM Vice President and Chief Scientist. From early 1970 until late 1973 he managed the Research Computation Facility at San Jose. Presently he is manager of the Molecular Dynamics Department at the San Jose Research Laboratory and is engaged in quantum chemical and statistical thermodynamics research. He is a member of the American Chemical Society, Sigma Xi, and the New York Academy of Sciences, and he is a Fellow of the American Physical Society.

Peter W. Markstein

Research Division, Yorktown Heights, New York.

Computer science (Ph.D., New York University, 1975). He joined IBM in 1959 as a scientific programmer. Participated in system programming for the STRETCH computer, including an experimental multiprogramming system, in 1961. He managed the computing center at the IBM Research Center at Yorktown Heights and directed its system programming activities until 1970. His most recent project has been a study of data security.

Robert W. Martin

Research Division, San Jose, California.

Electrical engineering (B.S., University of Arizona, 1960). Joined IBM in 1960 in the Advanced Systems Development Division. He worked on hardware development projects before joining the Human Factors and Simulation Laboratory, where he engineered terminal-to-computer interfaces and performed related programming tasks. Subsequently he was a full-time development programmer on the Library Management System project. In 1970 he joined the IBM Research Division and worked in the computation facility of the San Jose Research Laboratory on prerelease testing and installation of TSO. Since 1971 at San Jose he has managed the Laboratory Automation Group, which is responsible for system and application programming support in event-driven data processing.

John H. McFadyen

System Communications Division, Kingston, New York.

Physics (Ph.D., State University of New York at Stony Brook, 1969). Joined IBM in 1968 as a systems engineer in a branch office specializing in government, education, and medical activities. Following a Data Processing Division staff assignment, he joined the Systems Development Division. Since 1973, he has been working in communications systems architecture on Systems Network Architecture.

Ray J. Phillips

System Development Corporation, 2500 Colorado Avenue, Santa Monica, California.

Education (M.S., University of California at Los Angeles, 1956). Joined System Development Corporation in 1959, and has worked as a systems programmer on the ADEPT time sharing system, OS/MVT, CP-67, and VM/370. Participated in a penetration study of a computer for the U.S. Government. Currently working on TEXT II, a mini-computer system for newspaper production.

Donald L. Raimondi

Research Division, San Jose, California.

Chemistry (Ph.D., University of California, Berkeley, 1966). Joined IBM in 1960 as a computer operator in the Service Bureau Corporation, then moved to the Research Division in 1962 as a programmer. After taking a leave of absence in 1963, he rejoined IBM Research in 1966 to study methods of preparing thin films. In 1969 he began working in laboratory automation, being responsible primarily for systems and applications programming development for the IBM 1800 System and System/7.

Keith D. Ryder

System Communications Division, Kingston, New York.

Mathematics (M.A., University of Detroit, 1965). After joining IBM in 1965, he worked on control program design and development for the OS/360 MFT and MVT systems. Subsequently, he was involved in the definition of the address translation architecture for System/370 virtual systems. He then participated in the architecture, design, and performance analysis of OS/VS2 Release 1. He worked on the overall design of Systems Network Architecture support in VTAM and is presently in the Communications Design area.

Linda L. Spencer

Research Division, San Jose, California.

Languages (B.A., University of Delaware, 1964). Joined IBM in 1964 as a systems engineer in the Data Processing Division. From 1964 to 1968 she worked on programming assignments related to the IBM 1130, 1620, 1710, and 1800 systems. In 1968 she transferred to the Data Acquisition and Control Systems Center in San Jose, where she worked on field support and education assignments relating to 1800 applications. In 1973 she was assigned to the Data Processing Division's San Francisco Services Center as technical project leader on an 1800 application development contract. She joined the Research Division in 1974 as a systems programmer in the Laboratory Automation Group in the San Jose Research Laboratory.